

European Association of Remote Sensing Companies



Current Topics of the European EO Services Industry

Geoff Sawyer: EARSC Secretary General



EARSC presentation for EU-Japan partnering support mission – March 2015

• • • What is EARSC?

EARSC is a trade association (NGO), founded in 1989, which represents companies: offering and undertaking consulting and other services or supplying equipment in the field of remote sensing.

Our mission is

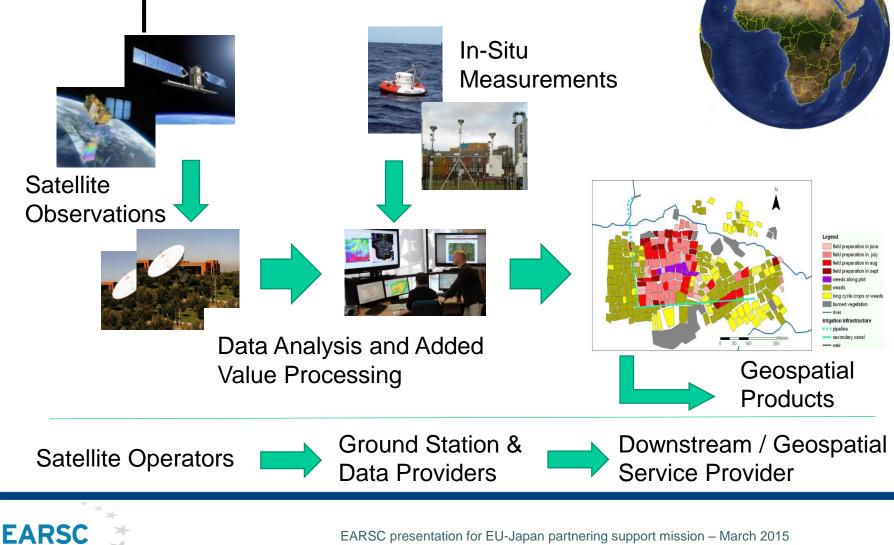
 to foster the development of the European Geo-Information Service Industry

We represent European geo-information providers creating a sustainable network between industry, decision makers and users

Our focus is on remote sensing from space-based platforms (satellites) but we also have members which are aircraft operators.



EO Services Value Chain



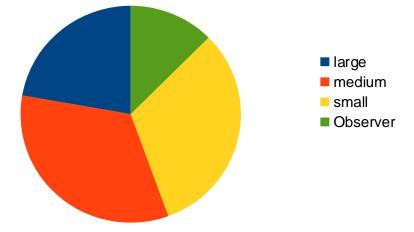
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EARSC composition

EARSC has 78 Members

- Large: 16 companies
- Medium: 24 companies
- Small: 28 companies
- Observers: 10 organizations

From 23 countries





EARSC Strategy

- Advocacy of Issues:
- Developing Relationships
 - Industrial sectors, research, users, stakeholders
- Communications / Raising awareness
- Statistics & Figures
 - Survey of the industry
- Network of Companies;

Representing 4 companies today:

EOmap (Germany)

Blackbridge (Germany)

Planetek Italia (Italy)

DHI Gras (Denmark)



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Address: Schlosshof 4, 82229 Seefeld, GERMANY

Contact: Thomas Heege, CEO, heege@eomap.de / +49 8152 9986 111

Background: EOMAP is a private enterprise, specialized in environmental monitoring and mapping services with focus on the aquatic sector. EOMAP is the largest producer of satellite derived bathymetry maps and the leading provider of high-resolution water quality services.

Strength:

- Fully operational VA production systems for multispectral satellites, installed in various satellite ground segments.

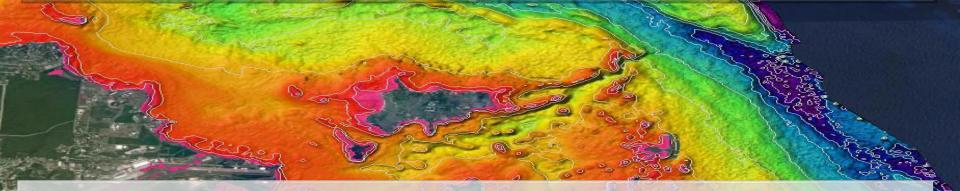
Products:

- water quality
- Bathymetry (water depth)





"For this location and coverage, we estimated to have made a **cost saving of approximately one million dollar** compared to a traditional executed bathymetry and/or topographic survey." J. Siermann, SHELL https://www.onepetro.org/conference-paper/IPTC-17346-MS)



"The services and products delivered for the Mexican Maya coast are exceptional and fundamental in developing our seafloor habitat baseline, [...]." Dr. Rainer Ressl, Director Geomatics Department of CONABIO/Mexico

Clients and users of EOMAP's products and services

esa

DigitalGlobe



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includes Landsat 8 USG

EOMAP





Address: BlackBridge, Kurfürstendamm, 22 – 10719, Berlin - Germany

Contact: César Santos, Vice President of Marketing, cesar.Santos@blackbridge.com +49 30 609 8300 100

Products: BlackBridge provides end-to-end solutions across the geospatial value chain. satellite operations, ground station services, and worldwide satellite imagery distribution through over 100 partners, value-added products and geo-service solutions.

For more information on BlackBridge, please visit www.blackbridge.com.

Strength:

- -Extensive imagery archive: *More than 6 billion km² of RapidEye satellite imagery*
- -Large collection capacity: More than 5 million *km² of imagery collected every day* -Competitive prices: *Best value for money*
- -Outstanding customer support: Best customer support in the industry



RapidEye Imagery for Agriculture: North America

BlackBridge Monitoring Programs in Northern America

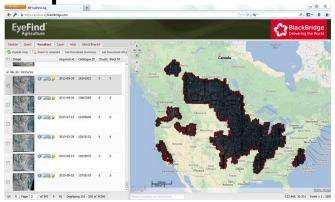


Fig.1: Eyefind Agriculture web interface showing the imaging area and the multi-date availability of ortho products, here over one location and throughout the growing season (left panel).

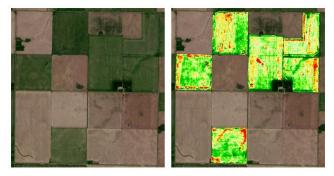


Fig.2: Example of subfield-level variations in 5-meter pixel size truecolor imagery (left) and a derived chlorophyll map (right).

User: US and Canadian Agriculture Services & Consultancy companies

Need: In-season imagery to extract **relevant agronomic information** to support farmers' decisions about their fields. Monthly coverage of high-resolution 5-meter ortho products including near real-time delivery between May and September

Challenge: 3 Million km² area of interest to be covered **monthly over four months** (4 coverages), providing access to all the data, orthorectified, in less than 48 h after collection

Initiative: Leverage the **collection capacity of the RapidEye satellite constellation** and BalckBridge's **cloud infrastructure and solutions** to image and provide quick access to the imagery through a web interface or a REST API

Results: 16 Million km² of cloud-free data delivered during the 2013 season

Service provider: BlackBridge (www.blackbridge.com/rapideye)



Planetek Italia



Address: Planetek Italia, www.planetek.it; Planetek Hellas, www.planetek.gr

Contact: Paolo Manunta, Head of EU Business Unit, manunta@planetek.it, T.+393292209428

Background: Planetek provides solutions to exploit the value of geospatial data.

Environmental & land monitoring, open-government, smart cities, scientific missions, planetary exploration.

Strength:

- satellite, aerial & drone data processing for cartography and geo-information production;
- INSPIRE: Spatial Data Infrastructures for geospatial data archive, management and sharing;
- real-time geo-location based solutions, GPS/Gallileo/GNSS and indoor location systems;
- software for satellite on-board data & image processing and ground segment infrastructure



INSPIRE Geoportal: Seamless access to EU environmental data



Fig 1. the INSPIRE Geoportal home page



Fig 2. the INSPIRE Geoportal discovery page

Users: Decision makers and people with an interest in environmental matters

Need: Access to INSPIRE spatial datasets and services through a unique entry point, with seamless integration of EU member states' services.

Challenge: enabling multi-lingual searches, iterative refinement of result sets and download. Accommodate cross-border combination of datasets in customized user maps.

Initiative: the EU Commission issued a tender for an innovative, reliable and performing INSPIRE Geoportal intended to be a central element within a federated infrastructure based on thousands of national and local services.

Results: full system flexible enough to maximize reuse potential, across different domains for the sharing of geospatial data with a wide public. This achievement makes Planetek Italia the ideal partner to build complex SDI.

Service provider: Planetek Italia





Address: DHI GRAS, Agern Alle 5, 2970 Horsholm, Denmark

Contact: Mikael Kamp Sørensen (CEO), mks@dhigroup.com / +4527114175

Background: DHI GRAS is the leading remote sensing company in Denmark,

EO applications including land cover mapping, wetlands and forests, water resources, bathymetry and water quality. DHI GRAS is part of DHIGROUP, an independent research and consulting organization, specialised in water environments with more than 1000 staff worldwide and offices in 30 countries.

Strengths:

-References from more than EO & GIS 200 projects in more than 50 countries, including strong references in SE Asia and local DHI offices in China, Vietnam, Malaysia, Singapore, Brunei, Indonesia

-integration of EO data in hydrological, hydrographic and ecological modeling



DHI - GRAS Cambodia Forest Cover Mapping





Fig 1. Training of staff from the FA in Cambodia



Fig 2. Mapping of forest cover in Cambodia

Users: Forestry Administration of Cambodia

Need: In order to comply with various international agreements (Kyoto, FAO) and to prepare data for REDD, the Government of Cambodia needs to deliver accurate forest cover statistics.

Challenge: Building capacity to enable the FA to derive accurate maps of forest cover of the country.

Initiative: A intensive training programme focusing on image processing, forest cover mapping and field verification has been conducted in the period 2006-2012 involving more than 20 FA staff.

Results: FA has used remote sensing to quantify forest cover changes in the area and to make relevant maps that are crucial for planning and decision support in Cambodia.

Service provider: DHI GRAS



EARSC Web-Site



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Provides direct access to EARSC Portal areas

Communities of interest

The European Association of Remote Sensing Companies (EARSC) is the European organization which –on a non-profit basis– coordinates and promotes activities of their members in the area of services based on the delivery of geo-information products on customer demand. EARSC has members active along the whole value chain and in neighbouring business sectors.

Whether your organization, objective is increase awareness, reinforce, our enducts and services, identify hav business portunities, or networking, let **EX SC member** hip to the voicing is organization at institute and commercial X arms and be your communication

Information and communication

Industry resource



BUILDING NETWORKS WITH EOPORTAL AND OUR USER COMMUNITIES

News

Library

User Commun

Resources

OGP's EO Subcommittee Workshop including EARSC certification workshop



